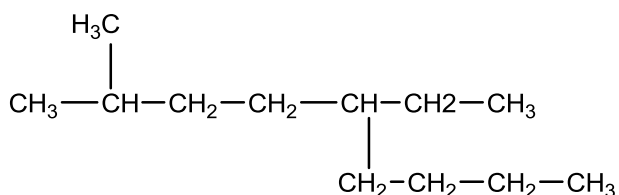


O-Chem worksheet

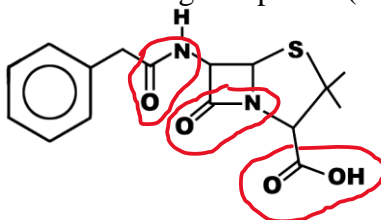
First /Last Name: _____

1. Write the IUPAC name for the following compound:



5-ethyl-2-methylnonane

- 2) Circle and name all functional groups on the following compound (Penicillin)



Amide, amide and carboxylic acid

- 3) Match the name of the functional group with its structure (not all will be used, those that are used are used only once). Write the letter of the structure on the left next to the name on the right.

A)	$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{OH}$	1) ester	<u>I</u>
B)	$\begin{array}{c} \text{H}_2\text{C} \\ \\ \text{H}_2\text{C} \end{array} \text{CH}-\text{OH}$	2) organic halide	_____
C)	$\text{H}_3\text{C}-\text{CH}_2-\text{NH}_2$	3) ketone	<u>E</u>
D)	$\begin{array}{c} \text{H}_3\text{C} \\ \\ \text{CH}-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{H} \\ \\ \text{H}_3\text{C} \end{array}$	4) alcohol	<u>B</u>
E)	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_2-\text{CH}_3$	5) amine	<u>C</u>
G)	$\text{H}_3\text{C}-\text{CH}=\overset{\text{CH}_3}{\text{C}}-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{NH}_2$	6) ether	<u>H</u>
H)	$\text{H}_3\text{C}-\text{O}-\text{CH}_3$	7) aldehyde	<u>D</u>
I)	$\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_3\text{C}-\text{C}-\text{O}-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	8) carboxylic acid	<u>A</u>
		9) amide	<u>G</u>

